



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,027	05/23/2001	Richard W. McCoy	242-140	9989
1009	7590	09/10/2004	EXAMINER	
KING & SCHICKLI, PLLC 247 NORTH BROADWAY LEXINGTON, KY 40507			ROYAL, PAUL	
			ART UNIT	PAPER NUMBER
			3611	

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/864,027

Applicant(s)

MCCOY ET AL.

Examiner

Paul Royal

Art Unit

3611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 15 June 2004 has been entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 11-13 and 18-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims recite the limitation "said towing vehicle". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 7-9 and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Steiler (US 6,080,014).

Steiler teaches a trailer hitch receiver assembly for towing a trailer behind a towing vehicle, comprising:

a frame member (3) including a hitch receiver box (4);

at least one mounting bracket (2) carried on the frame member for securing the frame member to the vehicle;

utility power outlets (16, 16A, 16B, 16C) carried on the first and second sides of frame member (3), adapted to receive a standard two prong or three prong plug; and

hinged covers (HCOVER, see Examiner annotated Figure 9).

Note, where Steiler teaches power outlets which are electrical connectors, it is understood to be inherent that the power outlet of Steiler is able to pass AC or DC power, including standard 110 VAC power or DC power and standard 12 VDC through each of the power outlets because the electrical conductivity of the pins within the connectors is not limited to a specific type of applied power and Steiler teaches, in table 1, an example of a range of pins which can be carried

Art Unit: 3611

within it's variety of connectors, thereby presenting a range of connector/pin combinations capable of carrying either AC or DC power.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 4-5, 15-17 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belinky et al. (US 5,904,261) in view of Hughes (US 5,766,020).

Belinky et al. teaches a trailer hitch receiver assembly for towing a trailer behind a towing vehicle, comprising:

a frame member (20) including a hitch receiver box;

at least one mounting bracket (MB1, see Examiner's annotated Figure 1) carried on the frame member for securing the frame member to the vehicle; and

a utility power outlet (40), adapted to receive a standard two prong or three prong plug or a single 12 volt power plug carried on the frame member (20).

Belinky et al. does not teach a trailer hitch receiver assembly including a trailer light plug.

Art Unit: 3611

Hughes teaches a trailer light plug (10) mateable with a plurality of trailer wiring harness connector receptacles and providing visual diagnostic indication observance by the user.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the trailer hitch receiver assembly of Belinky et al., to include a trailer light plug, as taught by Hughes, providing visual diagnostic indication observance by the user.

Note, where Belinky et al. teaches a power outlet which is an electrical connector, it is understood to be a design choice to supply AC power, including 110 VAC or DC power, including 12 VDC through a "standard" power outlet.

Note, the holes of Belinky are understood as appropriate for mounting any of a variety of power outlets, including a single 12 volt power plug, or a standard two prong or three prong plug because all that is required is the selection of a plug prong (or pin) holder which aligns with the hole pattern which requires only routine skill in the art.

Note using the power of the outlet(s) for powering equipment other than a trailer is understood to merely be intended use and is given little patentable weight.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Belinky et al. and Hughes, as applied to claim 2, in further view of Witkowski et al. (US 6,171,118).

Art Unit: 3611

Belinky et al. and Hughes, as applied to claim 2, includes all the limitations of claim 3 except wherein the power outlet includes a hinged cover.

Witkowski et al. teaches a power outlet (12) for mounting to an automobile body having a hinged cover (35) to protect the outlet from the environment.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the trailer hitch receiver assembly of Belinky et al. and Hughes, as applied to claim 2, to include the power outlet having a hinged cover, as taught by Witkowski et al., to protect the outlet from the environment.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Belinky et al. and Hughes, as applied to claim 2, in view of Witkowski et al. (US 6,171,118).

Belinky et al. and Hughes, as applied to claim 2, includes all the limitations of claim 6 except wherein the power outlet includes a hinged cover.

Witkowski et al. teaches a power outlet (12) for mounting to an automobile body having a hinged cover (35) to protect the outlet from the environment.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the trailer hitch receiver assembly of Belinky et al. and Hughes, as applied to claim 2, to include the power outlet having a hinged cover, as taught by Witkowski et al., to protect the outlet from the environment.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Steiler, as applied to claim 7, in view of Hughes (US 5,766,020).

Art Unit: 3611

Steiler, as applied to claim 7 teaches all the limitations except a trailer hitch receiver assembly including a trailer light plug.

Hughes teaches a trailer light plug (10) mateable with a plurality of trailer wiring harness connector receptacles and providing visual diagnostic indication observance by the user.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the trailer hitch receiver assembly of Steiler, to include a trailer light plug, as taught by Hughes, providing visual diagnostic indication observance by the user.

Note, where Steiler teaches a power outlet which is an electrical connector, it is understood to be a design choice to supply AC power or DC power through the power outlet because it is inherent that the electricity will be AC or DC.

It would have been obvious to one of ordinary skill in the art at the time of the invention to select either AC power or DC power for the electricity applied to the plugs.

### ***Response to Arguments***

8. Applicant argues nowhere does Steiler describe, contemplate, suggest, or provide any motivation to make the trailer hitch receiver of claims 7-9 and 20-21, having an AC power outlet adapted to receive a standard two prong or three prong plug. Applicant's arguments are not persuasive because a recitation of the intended use of the claimed invention must result in a structural difference



Art Unit: 3611

between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Steiler is fully capable of mounting an AC power outlet adapted to receive a standard two prong or three prong plug or for that matter a 36 pin connector because the number of pins or prongs in the connector have no relationship to the structure of the power outlet. While Steiler discloses a 6 way and 7 way connector, one of ordinary skill in the art would not be limited to only using these connectors in the outlet.

Further, where Steiler presents a power outlet, the connector, such as a standard two prong lug or three prong plug connector within the power outlet merely has to be mountable within the outlet and a standard two prong lug or three prong plug connector is mountable within the power outlet of Steiler because mounting a variety of connector prong arrangements is well within the spirit and scope of Steiler which expressly acknowledges variations of the invention are possible.

With respect to the prior art Hughes, Hughes clearly teaches a power adapter where one end is a cigarette lighter plug and the other end comprises various terminals available for a variety of uses, for example for interfacing the electrical system of a first vehicle with the power supply of a second vehicle or with an electronic or household appliance, see column 2, line to column 3, line 28. Where the adapter of Hughes interfaces the electrical system of two vehicles, it is understood to be usable for trailer lighting applications. The visual diagnostic indication feature of Hughes was merely an example of the motivation

Art Unit: 3611

of Hughes to use that adapter, which is not understood to be a limitation on how the adapter can be used.

Applicant's arguments against Belinky with respect to claims 11, 13, 18-19 are mute where those claims have been rejected because, after reviewing applicants arguments, it has become clear that applicant recites "said towing vehicle" without the proper antecedent basis. Once the claim language is perfected, the Examiner will be able to properly apply rejections or allow the claims.

Finally, the Examiner reasserts the relevant arguments presented in the previous Office Actions.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nolte Jr. teaches a battery charging device. Schneider teaches a power unit. Sagl teaches a power take-off switch. Ghare teaches vehicle power output means. Jubenville, et al. teaches a sensing device. Crafts teaches a power converter for an RV. Rogers teaches a cable for interconnecting vehicle lighting with a trailer. Hughes '147 teaches a modifiable harness adaptor. Hughes '332 teaches a vehicle interface system and method. Hughes '389 teaches a unified connector interface. McGuire teaches a universal trailer light locator. Glassford teaches a voltage adapter. Kelly teaches a light harness. Gutierrez et al. teaches an eight way electrical coupling system. Ihde teaches a towing connector.

Art Unit: 3611

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Royal whose telephone number is 703-308-8570. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley D. Morris can be reached on 703-308-0629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).




P. Royal  
9/7/04

Paul Royal  
Examiner  
Art Unit 3611



**MORRIS**  
**PATENT EXAMINER**  
**TECHNOLOGY CENTER 3600**



**LESLEY D. MORRIS**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3600**